

3.0 AFFECTED ENVIRONMENT

The 1995 Cassini EIS addressed the affected environment in terms of the local/regional environment and the global environment that could potentially be affected by the Proposed Action and the alternatives. Given that potential accidents and the resulting radiological consequences are the focus of this SEIS, only the local/regional land use and population descriptions are summarized here. There has been no substantial change in the characteristics of the global environment since publication of the 1995 Cassini EIS.

The Cassini mission would be launched from CCAS, which is located on the east coast of Brevard County near the city of Cocoa Beach, approximately 24 km (15 mi) north of Patrick Air Force Base. CCAS is bounded by NASA/KSC on the north, the Atlantic Ocean on the east, the city of Cape Canaveral on the south and the Banana River and KSC/Merritt Island National Wildlife Refuge on the west.

The six-county region surrounding CCAS consists of Volusia, Seminole, Lake, Orange, Osceola and Brevard Counties. The region is about 1.7 million ha (4.1 million acres) in size, of which about 8 percent (132,742 ha; 328,000 acres) is urbanized. The most heavily populated urban areas in the region are Orlando in Orange County, about 85 km (53 mi), and Titusville, about 24 km (15 mi) to the west of the Titan IV launch complexes at CCAS, with the Daytona Beach/Ormond Beach area about 110 km (68 mi) and Port Orange and New Smyrna Beach 58 and 79 km (36 and 49 miles), respectively, to the north. To the east of CCAS is the Atlantic Ocean, with the city of Cape Canaveral immediately to the south. Cocoa Beach lies about 28 km (17 mi) to the south, with Melbourne and Palm Bay about 52 km (32 mi) also to the south.

About 35 percent of the land in the region is devoted to agriculture (about 566,580 ha; 1.4 million acres) and about 25 percent to conservation and recreation lands (about 404,700 ha; 1 million acres). Within the agricultural area, the three principal uses are crops, citrus and pasturage. About 29,900 ha (73,850 acres) is used for cropland, 50,200 ha (124,000 acres) is in citrus production, and about 309,100 ha (763,500 acres) is in pastureland. The region also contains about 2,185 ha (5,400 acres) of saltwater beaches and about 32 ha (80 acres) of historical and archaeological sites.

CCAS occupies about 6,394 ha (15,800 acres) of the barrier beach that also contains the city of Cape Canaveral. Approximately 1,880 ha (4,700 acres) of the facility, or 30 percent of the station, is developed, consisting of over 40 launch complexes and support facilities, many of which have been deactivated. The remaining 70 percent (about 4,440 ha; 11,100 acres) is unimproved land. The two Titan IV launch complexes (LC 40 and LC 41) are located in the northeastern most section of CCAS, about 450 m (1,500 ft) inland from the Atlantic Ocean.

About 85 percent of the regional population lives in urban areas, with the largest concentrations in three metropolitan areas: (1) Orlando in Orange County, with

expansions into the Lake Mary and Sanford areas of Seminole County to the north and into the Kissimmee and St. Cloud areas of Osceola County to the south; (2) the coastal area of Volusia County, including Daytona Beach, Ormond Beach and New Smyrna Beach; and (3) along the Indian River Lagoon and Coastal area of Brevard County, specifically the cities of Titusville, Melbourne and Palm Bay.

The 1990 population of the region numbered about 2 million people. About 86 percent of the regional population were white, 11 percent black, 2 percent Native American/Eskimo/Aleut/Pacific Islander/Asian and the remaining 1 percent not falling into any of the above categories. About 6 percent of the total population was of Hispanic origin. About 9 percent of the regional population (about 189,000 people) lived within 32 km (20 mi) of the Titan IV launch complexes at CCAS. The racial and ethnic composition of that group reflected the overall regional population, being predominantly white. Approximately 10 percent were black, with the remaining 10 percent falling into the other two categories. About 6 percent of this population were of Hispanic origin. The uncontrolled population nearest the launch complexes is about 16 km (10 mi) to the southeast and contains less than 2 percent of the regional population. Racial composition was about 97.5 percent white, 1 percent black and the remaining 1.5 percent divided amongst the remaining two racial categories. About 2 percent of the uncontrolled population were of Hispanic origin.

The 1990 median annual household income across the six-county region ranged from \$7,237 to \$76,232, with both ends of the range occurring in Orange County. Within 32 km (20 miles) of the launch complexes, the median income ranged from \$10,940 to \$55,606, with most census tracts within this area recording median incomes in excess of \$25,000. The median income within the nearest uncontrolled population (16 km, [10 mi] from the launch complexes) was \$34,000.

Cassini Mission

Final Supplemental Environmental Impact Statement

Executive Summary

Chapter 1

Appendix A

Chapter 2

Appendix B

Chapter 3

Appendix C

Chapter 4

Appendix D

Chapter 5

Appendix E

Chapter 6

Chapter 7

Chapter 8